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IN REPLY
REFER TO DSCC -VAI (Mr. Antonelli/ (DSN 850) 614-692-0576/ra)

April 12, 2004

SUBJECT: Initial Draft of MIL-DTL-21097/2F, /3F, /11J, /13C, /14F, /15G, /16F, /17E, /18D, /19D, /21B, /4F, /5F
Connectors, Electrical, Printed Wiring Boards, General Purpose, General specification for, Project
number 5935-4505-001-013.

Military/Industry Distribution

The initial drafts for the subject documents, which are being revised for conversion to detail status in accordance with acquisition reform and to replace obsolete references, has been placed on the DSCC-VAI website for you to review and comment. The website address is;

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Comments or suggested changes that are not editorial in nature should include justification. Industrial activities should indicate whether they are commenting from the standpoint of a "User" or "Manufacturer." Military review activities should forward their comments to their custodians in sufficient time to allow for consolidating the departmental reply. Military departments must identify their comments as either "Essential" or "Suggested." Essential comments, which must be accepted or withdrawn, should be supported by test data unless they obviously require no data.

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If you do not have access to the world wide web or you have problems downloading this document, please notify Mr. Ralph Antonelli at either the above e-mail address or fax number or by telephone at (614) 692-0576.

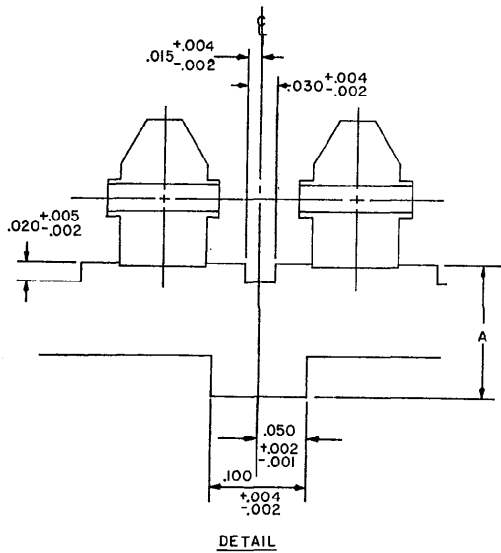
Sincerely,

/ signed /

RICHARD L. TAYLOR
Chief
Interconnection Devices Team

cc:
VQP (Tony Carnevalae)
CDAB (Dave Barman)
AF -11 (Jim Arnold - 88 OSS/OSE)

MIL-DTL-21097/2F



Inches	mm	Inches	mm
.001	0.03	.100	2.54
.002	0.05	.128	3.25
.003	0.08	.135	3.43
.004	0.10	.137	3.48
.005	0.13	.140	3.56
.015	0.38	.172	4.37
.020	0.51	.200	5.08
.026	0.66	.205	5.21
.030	0.76	.250	6.35
.040	1.02	.313	7.95
.044	1.12	.326	8.28
.050	1.27	.334	8.48
.056	1.42	.340	8.64
.088	2.24	.453	11.51
.096	2.44	.737	18.72

Polarizing cavity for even number of contact positions

Board guide	A dim
	+ .002 (.05)
	- .004 (.10)
.06 (1.52)	.119 (3.02)
.09 (2.29)	.150 (3.81)

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is $\pm .010$ (.25 mm) for three place decimals.
3. Contacts and terminals shall be designated on the connector using numerals in the locations shown.
4. The shape of the barriers is optional except that barriers shall not protrude beyond the plane of the underside of the mounting flange.
5. Slot shall accept the following thickness printed wiring boards:
 Size 2 - .054 (1.37 mm) to .071 (1.80 mm)
 Size 3 - .086 (2.18 mm) to .103 (2.62 mm)
 Slot shall prevent entry of printed wiring board having the following thickness:
 Size 2 - .084 (2.13 mm)
 Size 3 - .113 (2.87 mm)
6. Metric equivalents (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
7. Millimeters are in parentheses.

FIGURE 1. Single row contacts, type CR – Continued.

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TABLE I. Connector, electrical, composite, receptacle, type CR, mounting provision A.

Dash number	Style	Class	Size	Dimensions (inches) <u>1/</u>				
				A (Maximum)	B ± 0.008 (0.20)	C $+0.010$ -0.000	D ± 0.005 (0.13)	E ± 0.010 (0.25)
01	12	a	2	3.150 (80.01)	2.880 (73.15)	2.610 (66.29)	2.200 (55.88)	.123 (3.12) .154 (3.91) .186 (4.72) .123 (3.12) .154 (3.91) .186 (4.72)
02		a	3					
03		b	2					
04		b	2					
05		b	2					
06		b	3					
07		b	3					
08		b	3					
09	15	a	2	3.750 (95.25)	3.480 (88.39)	3.210 (81.53)	2.800 (71.12)	.123 (3.12) .154 (3.91) .186 (4.72) .123 (3.12) .154 (3.91) .186 (4.72)
10		a	3					
11		b	2					
12		b	2					
13		b	2					
14		b	3					
15		b	3					
16		b	3					

1/ Millimeters are in parentheses .

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TABLE I. Connector, electrical, composite, receptacle, type CR, mounting provision A – Continued

Dash number	Style	Class	Size	Dimensions (inches) ^{1/}				
				A (Maximum)	B ±0.008 (0.20)	C +0.010 -0.000	D ±0.005 (0.13)	E ±0.010 (0.25)
17	18	a	2	4.350 (110.40)	4.080 (103.63)	3.810 (96.77)	3.400 (86.36)	.123 (3.12)
18		a	3					.154 (3.91)
19		b	2					.186 (4.72)
20		b	2					.123 (3.12)
21		b	2					.154 (3.91)
22		b	3					.186 (4.72)
23		b	3					.123 (3.12)
24		b	3					.154 (3.91)
25	22	a	2	5.150 (130.81)	4.880 (123.95)	4.610 (117.09)	4.200 (106.68)	.186 (4.72)
26		a	3					.123 (3.12)
27		b	2					.154 (3.91)
28		b	2					.186 (4.72)
29		b	2					.123 (3.12)
30		b	3					.154 (3.91)
31		b	3					.186 (4.72)
32		b	3					.123 (3.12)
33	26	a	2	5.950 (151.13)	5.680 (144.27)	5.410 (137.41)	5.000 (127.0)	.154 (3.91)
34		a	3					.186 (4.72)
35		b	2					.123 (3.12)
36		b	2					.154 (3.91)
37		b	2					.186 (4.72)
38		b	3					.123 (3.12)
39		b	3					.154 (3.91)
40		b	3					.186 (4.72)

^{1/} Millimeters are in parentheses.

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REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Polarizing keys: Part no. M21097/11-03 or M21097/11-04. A key is inserted into the card slot between contact numbers 1 and 2, 2 and 3, 3 and 4, etc.

Mating male adapters: Shall conform to MIL-C-21097/3.

Finish: Gold plating in accordance with ASTM B488, type II, code C, class 1.27, over nickel plating per SAE-AMS-QQ-N-290, class 2, 30 to 150 microinches.

Retention of qualification: Group A inspection only.

Part or identifying number (PIN): M21097/2-(dash number from table I).

NOTES

Referenced documents. In addition to MIL-DTL-21097, this specification sheet references the following documents.

MIL-DTL-21097/3
MIL-DTL-21097/11
ASTM B488
SAE-AMS-QQ-N-290

CONCLUDING MATERIALS

Custodians:

Army – CR
Navy – EC
Air Force – 11
DLA – CC

Preparing activity:

DLA - CC

(Project 5935-4505-001)

Review activities:

Army – AR, AT, AV, MI
Navy – AS, MC, OS, SH

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://www.dodssp.daps.mil>.

PROJECT NUMBER		COMPILATION OF COMMENTS		COMMENT NUMBER
DOCUMENT		COMMENTOR IND NAME OR CODE	[] MFR [] USER [] IND ASSOC	
DOD USE ONLY	DEPT	[] A [] N [] AF [] DLA [] NSA [] CNDN [] NASA		[] ESSENTIAL [] SUGGESTED
RECOMMENDED DISPOSITION OF COMMENT: [] ACCEPTANCE [] NON-ACCEPTED-SEE REASON [] WITHDRAW [] MODIFY [] DISCUSS				
FINAL DISPOSITON OF COMMENT: [] ACCEPTED [] NON-ACCEPTED [] WITHDRAW [] MODIFY				

DESC FORM 155

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DOCUMENT		COMMENTOR IND NAME OR CODE	[] MFR [] USER [] IND ASSOC	
DOD USE ONLY	DEPT	[] A [] N [] AF [] DLA [] NSA [] CNDN [] NASA		[] ESSENTIAL [] SUGGESTED
RECOMMENDED DISPOSITION OF COMMENT: [] ACCEPTANCE [] NON-ACCEPTED-SEE REASON [] WITHDRAW [] MODIFY [] DISCUSS				
FINAL DISPOSITON OF COMMENT: [] ACCEPTED [] NON-ACCEPTED [] WITHDRAW [] MODIFY				

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